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Calendar of Forthcoming Events

(For detailed information on the cited events, please refer to the *Applied Catalysis* issue mentioned with the entry)

Nov. 28–Dec. 1, 1988 Sapporo, Japan	**Hokkaido University International Symposium on Acid-Base Catalysis** Contact: Dr. H. Hattori, Dept. of Chemistry, Fac of Science, Hokkaido University, Sapporro 060, Japan
Nov. 28–Dec. 3, 1988 Boston, MA, U.S.A.	**1988 Fall Meeting of the Materials Research Society** Contact: Materials Research Society, 9800 McKnight Road, Suite 327, Pittsburgh, PA 15237, U.S.A.
Dec. 15–17, 1988 Madras, India	**9th National Symposium on Catalysis** Contact: Dr. R. Sitaraman, Madras Refineries Ltd., R&D Centre, Manali, Madras-600 068, India
Dec. 19–21, 1988 London, U.K.	**Advanced Ceramics in Chemical Process Engineering** Contact: Mrs. S.C. Buchanan, The Institute of Ceramics, Shelton House. Stoke Road, ST42DR Stoke-on-Trent. U.K. (*Appl. Catal.* 42 (1988) 355)
March 4–8, 1989 Kuwait	**Catalysts in Petroleum Refining Conference** Contact: Dr. Saed Akashah, Catalysts in Petroleum Refining Conference, Government Relations and Conference Coordination, Kuwait Institute for Scientific Research, P.O. Box 24885, Safat/13109, Kuwait (*Appl. Catal.*, 38 (1988) 382)
March 6–9, 1989 San Francisco, CA, U.S.A.	***1989 Joint Symposium on Stationary Combustion NO_x Control** Contact: Claudia Runge, Electric Power Res. Inst., 3412 Hillview Avenue, Palo Alto, CA 94303, U.S.A.
March 6–10, 1989 Atlanta, GA, U.S.A.	**40th Pittsburgh Conference & Exposition on Analytical Chemistry and Applied Spectroscopy** Contact: Pittsburgh Conference, 12 Federal Drive, Suite 322, Pittsburgh, PA 15235, U.S.A. (*Appl. Catal.*, 42 (1988) 186)
April 11–13, 1989 Liverpool, U.K.	**Faraday Discussion on "Catalysis by Well-Characterised Materials"** Contact: Prof. R.W. Joyner, Leverhulme Centre for Innovative Catalysis, Phys. and Industrial Chem. University of Liverpool, P.O. Box 147, Liverpool L69 3BX, U.K. (*Appl. Catal.*, 35 (1988) 415)
April 24–29, 1989 San Diego, CA, U.S.A.	***1989 Spring Meeting of the Materials Research Society** Contact: R.F.C. Farrow, IBM Almaden Research Center, 650 Harry Rd., Mail Stop K32/801D, San Jose, CA 95120-6099, U.S.A.
May 7–11, 1989 Dearborn, MI, U.S.A.	**11th North Americal Meeting of the Catalysis Society** Contact: Dr. C.B. Murchison, The Dow Chemical Co., 1776 Bldg., Midland, MI 48674, U.S.A. (*Appl. Catal.*, 43 (1988) 202)
May 22–23, 1989 Enschede, The Netherlands	**2nd European Workshop on Methane Activation** Contact: Prof. J.R.H. Ross, Dept. of Chemical Technology, University of Twente, P.O. Box 217, 7500 AE Enschede, The Netherlands (*Appl. Catal.*, 43 (1988) 203).

June 12–16, 1989 Leipzig, G.D.R.	**2nd International Conference on Spillover** Contact: Prof. K.-H. Steinberg, Karl-Marx University Leipzig, Section of Chemistry, Talstrasse 35, Leipzig, DDR-7010, G.D.R. (*Appl. Catal.*, 43 (1988) 203)
June 28–30, 1989 Midland, MI, U.S.A.	**Chemically Modified Oxide Surfaces Symposium** Contact: W.T. Collins, Mail Stop C41C00, Dow Corning Co., Midland, MI 48686—0994, U.S.A. (*Appl. Catal.*, 43 (1988) 203)
July 10–14, 1989 Amsterdam, The Netherlands	**8th International Zeolite Conference** Contact: M.F.M. Post, Koninklijke/Shell Laboratory, P.O. Box 3003, 1003 AA Amsterdam, The Netherlands (*Appl. Catal.*, 38 (1988) 184)
July 16–21, 1989 Berlin (West), Germany	**G.-M. Schwab European Catalysis Conference** Contact: Prof. G. Ertl, Fritz-Haber Institute der Max-Planck-Gesellschaft, Faradayweg 4-6, 1000 Berlin 33 (West), Germany (*Appl. Catal.*, 31 (1987) 389)
Aug. 7–11, 1989 Newark, DE, U.S.A.	**5th International Symposium on Magnetic Resonance in Colloid and Interface Science** Contact: Prof. Cecil Dybowski, University of Delaware, Newark, DE 19711, U.S.A. (*Appl. Catal.*, 41 (1988) 344)
August 28– September 2, 1989 Strasbourg, France	**9th International Clay Conference** Contact: Dr. H. Paquet, Institut Geologie, 1 rue Blessig, 67084 Strasbourg, France
Sept. 4–7, 1989 Brussels, Belgium	**2nd Conference on Catalysis and Automotive Pollution Control** Contact: Dr. A. Frennet or Dr. A. Crucq, Catalyse Hétérogène, CP 243, Campus Plaine ULB, Bvd. du Triomphe, B-1050 Brussels, Belgium (*Appl. Catal.*, 38 (1988) 383)
Sept. 4–8, 1989 Budapest, Hungary	**ICAME '89** Contact: ICAME '89, Central Institute for Physics, P.O. Box 49, H-1525 Budapest, Hungary (*Appl. Catal.*, 42 (1988) 356)
Sept. 10–15, 1989 Miami, FL, U.S.A.	**ACS Symposium of Petroleum Chemistry Division "The Hydrocarbon Chemistry of FCC Naphta Formation"** Contact: H.J. Lovink, AKZO Chemie — Ketjen Catalysts, P.O. Box 247, 3800 AE Amersfoort, The Netherlands; or: L.A. Pine, Exxon Res. and Dev. Lab., P.O. Box 2226, Baton Rouge, LA 70821, U.S.A. (*Appl. Catal.*, 37 (1988) 358)
Sept. 10–15, 1989 Antwerp, Belgium	**International Symposium on Gas Separation Technology** Contact: Dr.R. Dewolfs, University of Antwerp (UIA), Dept. of Chemistry, Universiteitsplein 1, B-2610 Antwerp-Wilrijk, Belgium (*Appl. Catal.*, 42 (1988) 186)
Sept. 19–22, 1989 Rimini, Italy	**New Developments in Selective Oxidation** Contact: Prof. G. Centi, University of Bologna, Dept. of Industrial Chemistry and Materials, V.le Risorgimento 4, I-40136 Bologna, Italy (*Appl. Catal.*, 44 (1988))

Sept. 25–29, 1989 Pisa, Italy	***6th International Symposium on Relations between Homogeneous and Heterogeneous Catalysis** Contact: Prof. Glauco Sbrana, VI SHHC, Dipartimento di Chimica e Chimica Industriale, Università di Pisa, Via Risorgimento 35, 56126 Pisa, Italy (revised entry)
Sept. 26–28, 1989 Montreux, Switzerland	**Montreux Chemical Information Meeting** Contact: H. Collier, Infonortics Ltd., 9a High Street, Caine, Wiltshire SN11 OBS, U.K.
July 8–11, 1990 Toronto, Ont., Canada	**11th International Symposium on Chemical Reaction Engineering** Contact: Prof. A.T. Bell, Dept. of Chemical Engineering, University of California, Berkeley, CA 94720, U.S.A. (*Appl. Catal.*, 43 (1988) 203)
Aug. 12–17, 1990 Oslo, Norway	**Natural Gas Conversion Symposium Oslo 1990** Contact: SI-forum, Senter for industriforskning, P.O. Box 124, Blindern, N-0314 Oslo 3, Norway (*Appl. Catal.*, 43 (1988) 203)
August 20–23, 1990 Leipzig, G.D.R.	**Zeocat 90: Catalysis and Adsorption by Zeolites** Contact: Prof. G. Öhlmann, Zentralinstitut für physikalische Chemie der Akademie der Wissenschaften der DDR, Rudower Chaussee 5, Berlin 1199, G.D.R. (*Appl. Catal.*, 36 (1988) 342)

*Indicates new entry

Applied Catalysis includes announcements free of charge at the discretion of the Editor. Information on planned events should be sent well in advance (preferably 6 months or more) to Prof. J.R.H. Ross at the address given on the first page of this News Brief, or to Applied Catalysis, Desk Editorial Office, P.O. Box 330, 1000 AH Amsterdam, The Netherlands.

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CATALYST PERFORMANCE TESTING, PROCEEDINGS OF THE SYMPOSIUM ORGANIZED AT UNILEVER RESEARCH LABORATORY, VLAARDINGEN, THE NETHERLANDS, MARCH 28–29, 1988

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INSTRUCTIONS TO AUTHORS

Submission of papers. Authors are requested to submit **THREE copies** of their articles (complete in all respects) to the Editor-in-Chief or to one of the Editors.

- Professor E. G. Derouane, Facultés Universitaires de Namur, Dept. de Chimie, rue de Bruxelles 61, B-5000 Namur, Belgium. Telefax: +32+81 23 03 91. *(Molecular aspects of heterogeneous catalysis and catalytic fundamentals of industrial processes)*
- Professor W. Marconi, Assoreni, via E. Ramarini, 32 C.P. 15, 00015, Monterotondo (Rome), Italy. Telefax: +39+65 900 2141. *(Transition metal and enzymic catalysis)*
- Professor C. U. Pittman, Jr., Department of Chemistry, Mississippi State University, Drawer CH, Mississippi State, MS 39762, U.S.A. Telefax: +1+601 325 3560. *(Transition metal catalysis and applications to organic and polymer chemistry)*
- Professor J. A. Dumesic, University of Wisconsin, Dept. of Chemical Engineering, Madison, WI 53706, U.S.A. Telefax: +1+608 262 0123. *(Molecular aspects of heterogeneous and homogeneous kinetics and processes at surfaces)*
- Professor K. I. Zamaraev, Institute of Catalysis, Prospekt Akademika Lavrentieva 3, 630090 Novosibirsk, U.S.S.R. Telex 133 122 SOVET SU. *(Regional Editor for Soviet Union and Eastern Europe on all aspects of molecular heterogeneous and homogeneous catalysis)*
- Professor K. Tamaru, Dept. of Chemistry, Science University of Tokyo, 1-3 Kagurazaka, Shinjuku-ku, Tokyo 162, Japan. Telefax: +81+3 260 4294. *(Mechanisms of catalytic reactions, metal catalysts, oxide catalysts, spectroscopic techniques)*

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Studies in Surface Science and Catalysis Volume 42

Laboratory Studies of Heterogeneous Catalytic Processes

by ERHARD G. CHRISTOFFEL
Revised and edited by Z. PAÁL, Hungarian Academy of Sciences, Budapest, Hungary

Providing a concise treatment of methods of heterogeneous catalysis used in the laboratory, this book describes the basic phenomena of heterogeneous catalytic reaction systems and discusses in detail the experimental methods and procedures for investigating these systems.

The book opens with an actual example which illustrates the whole procedure. The next chapter presents the basic phenomena of catalytic systems and the concepts used to study them. The third chapter describes methods for investigating reaction mechanisms and the dynamics of heterogeneous catalytic reaction systems. Lastly, a chapter discusses the design and operation of laboratory reactors often used for investigating heterogeneous catalytic reactions.

The approach is interdisciplinary, providing a balance between chemical engineering and chemical viewpoints of treating laboratory-scale reactors. Chemists and chemical engineers involved in catalyst research will be very interested in this book and it can also be used in specialized courses for graduate students in chemistry or in chemical reaction engineering.

Contents: In memorian Erhard G. Christoffel. Introduction. References. **Basic Phenomena and Concepts in Catalysis.** Historical. Catalytic systems. Laboratory studies of heterogeneous catalytic processes. References. **Investigation of Heterogeneous Catalytic Reaction Systems.** Investigation of reaction mechanisms. Dynamic modeling. Mass transport in porous media. Catalyst deactivation. References. **Laboratory Reactors.** Micropulse reactor. Single-pellet diffusion reactors. Fixed-bed reactors. Recycle reactors. Transient response method. References.

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